

L 43650-66 EWT(d)/EWT(m)/EWP(f)/T-2 TCH

ACC NR: AT6014876

SOURCE CODE: UR/2752/65/000/077/0022/0024

AUTHOR: Ignat'yeva, O. V.; Karnaukhov, Yu. S.; Fefilov, A. V.

61  
B+1

ORG: none

TITLE: Modeling of the transient processes in an automatic system of temperature control of the cooling water of the 8DRN 43/61 engine <sup>82</sup>

SOURCE: Leningrad. Tsentral'nyy nauchno-issledovatel'skiy institut morskogo flota. Trudy, no. 77, 1965. Avtomatizatsiya i vychislitel'naya tekhnika na morskoy floye (Automation and computer engineering in the Merchant Marine), 22-24

TOPIC TAGS: engine cooling system, automatic temperature control, transition flow, model theory, *marine engineering, diesel engine / 8DRN 43-61 diesel engine* <sup>26</sup>

ABSTRACT: The article discusses the results obtained in modeling, on the MN-7 machine, the transient processes that occur in an automatic system of temperature control of the 8DRN 43/61 engine's cooling water for three different control schemes employed in marine transport vessels. Current work was occasioned by earlier interest in how such transient processes change in an actual engine. The constants of the equation describing the control system dynamics are determined from experimental curves for diesels (V. P. Petrov. Inform. sb. TsNIIMF, no. 116, 1964). In scheme 1, the control element is installed in the internal circuit of the cooling system and the

Card 1/2

UDC: 62-501.72:621.436-71

L 43650-66

ACC NR: AT6014876

sensing element at the engine input. In scheme 2, the control element is placed in the internal circuit of the cooling system and the sensor is placed at the engine water output. In scheme 3, the control element is placed in the circuit of the water input and control is exercised on the temperature at the engine output. The authors demonstrate that scheme 2 is the most rational choice on the basis of both static and dynamic indications. Orig. art. has: 1 figure.

SUB CODE: 21,12,13/ SUBM DATE: none/ ORIG REF: 001

LS

Card 2/2

IGNAT'YEVA, R. P.

1-FW

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R000518410015-6

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R000518410015-6"

IGNAT'YEVA, R. P.

2 IAW

X

144

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R000518410015-6

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R000518410015-6"

84572

S/020/60/134/001/029/038 XX  
C111/C222

16.2000

AUTHOR: Ignat'yeva, R.P.

TITLE: Theorems Stating the Existence and Entrance of <sup>16</sup>Subgroups in a Finite Group

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 134, No. 1, pp. 33-35

TEXT: The terminology and notations are taken from (Ref. 1-3).

Theorem 1: Let  $h'$  be a reduced  $\square$  - whole - blocked divisor and  $s$  be a separable divisor of the order  $g$  of the group  $G$ . Then  $G$  has at least one

subgroup of the order  $\frac{h's}{(h',s)}c$ , where  $c$  is a  $\square$  - prime number. X

Definition 1: The divisor  $hs$  of the order  $g$  of the group  $G$  is called whole-blocked-separable if it is the product of a whole-blocked divisor  $h$  and a separable divisor  $s$  of the order  $g$  of  $G$ .

Theorem 2: If the divisor  $hs$  of the order  $g$  of  $G$  is whole-blocked-separable, then every solvable subgroup  $A$  of the order  $a$  which divides  $hs$ , is contained in at least one subgroup of the order  $hs$  of the group  $G$ .

Theorem 3: Let

Card 1/5

84572

Theorems Stating the Existence and Entrance  
of Subgroups in a Finite Group

S/020/60/134/001/029/038 XX  
C111/C222

(1)  $h_1, h_2, \dots, h_n$

be a non-empty set of whole-blocked divisors and

(2)  $s_1, s_2, \dots, s_m$

be a non-empty set of separable divisors of the order  $g$  of  $G$ . Then for two  
arbitrary non-empty subsets  $h_{i_1}, h_{i_2}, \dots, h_{i_r}$  and  $h_{j_1}, h_{j_2}, \dots, h_{j_l}$  of

(1) in  $G$  there exists at least one subgroup each of the orders

$$A = (h_{j_1}, s_{k_1}) \left( \frac{h_{j_2}}{(h_{j_2}, h_{j_1})}, s_{k_2} \right) \dots \left( \frac{h_{j_l}}{h_{j_1}, h_{j_1}, h_{j_2}, \dots, h_{j_{l-1}}}, s_{k_l} \right)$$

Card 2/5



84572

Theorems Stating the Existence and Entrance of Subgroups in a Finite Group

S/020/60/134/001/029/038 XX  
C111/C222

$$B = \frac{(g, h_{j_1}, h_{j_2}, \dots, h_{j_r}) \cdot A}{((g, h_{j_1}, h_{j_2}, \dots, h_{j_r}), A)}$$

where every number  $s_{k_1}, \dots, s_{k_l}$  equals one of the separable divisors of (2).

Here for every order  $A$  all subgroups in  $G$  are conjugate with each other, while those subgroups of the order  $B$  for which  $\frac{A}{((g, h_{i_1}, h_{i_2}, \dots, h_{i_r}), A)} = d > 1$ , are

$\square(d)$  - solvable.

Theorem 4 asserts that if  $h_1$  and  $h_2$  are whole - blocked divisors and  $s$  is a separable divisor of the order  $g$  of  $G$ , then  $G$  has at least one subgroup each of the following orders:

$$a_1 = \frac{h_1}{d}(d, s), a_2 = \frac{h_2}{d}(d, s), a_3 = \frac{d(h_1, s)}{(d, s)}, a_4 = \frac{d(h_2, s)}{(d, s)}, a_5 = \frac{h_1(h_2, s)}{(d, s)},$$

Card 3/5

84572

Theorems Stating the Existence and Entrance of Subgroups in a Finite Group

S/020/60/134/001/029/038 XX  
C111/C222

$$a_6 = \frac{h_2(h_1, s)}{(d, s)}, \quad a_7 = \frac{h_1}{d}(h_2, s), \quad a_8 = \frac{h_2}{d}(h_1, s), \quad a_9 = \frac{h_1 h_2}{d^2}(d, s),$$

$$a_{10} = d \left( \frac{h_1 h_2}{d^2}, s \right), \quad \text{where } d = (h_1 h_2). \quad \text{If the paranthesized part of these}$$

expressions equals  $m > 1$ , then the corresponding subgroups are  $\Pi(m)$ -solvable

(e.g. if  $\frac{(h_2, s)}{(d, s)} = m_3 > 1$ , then the subgroups of the orders  $a_4, a_5$  are

$\Pi(m_3)$  - solvable.

Theorem 5 corresponds to the theorem 3 for the case that instead of (1) a set

$$(3) \quad h'_1, h'_2, \dots, h'_n$$

of reduced  $\Pi$  - whole - blocked divisors is given and (2) remains the same; then in A and B all  $h_k$  must be replaced by  $h'_k$  and in the expression for B

Card 4/5

84572

Theorems Stating the Existence and Entrance  
of Subgroups in a Finite Group

S/020/60/134/001/029/038 XX  
C111/C222

a  $\Pi$  - prime number  $c$  is added as a factor (the last assertion of theorem 3  
on the subgroups of the order  $B$  is omitted.)  
The author thanks S.A. Chunikhin for the theme.  
There are 6 references: 5 Soviet and 1 English.

[Abstracter's note : (Ref. 1-3) are papers of S.A. Chunikhin in  
Matematicheskii sbornik, 1956, Vol. 39, No. 3, p. 465 ;  
Matematicheskii sbornik, 1957, Vol. 43, No. 1, p. 49 and  
Doklady Akademii nauk SSR, 1948, Vol. 59, No. 3, p. 443]

ASSOCIATION: Kabardino-Balkarskiy gosudarstvennyy universitet (Kabardino-  
Balkarskiy State University) X

PRESENTED: April 23, 1960, by A.I. Mal'tsev, Academician

SUBMITTED: April 20, 1960

Card 5/5

IGNAT'YEVA, R.P.

Imbedding and conjugateness of subgroups of a finite group.  
Uch. zap. Kab.-Bal. gos. un. no.17:7-9 '63. (MIRA 17:1)

IGNAT'YEVA, S. A., Cand Med Sci -- (diss) "Experimental study of anti-  
biotic vaccines <sup>from the causative agent of typhoid.</sup>" Voronezh, 1958.  
15 pp (Voronezh State Med Inst), 220 copies (KL, 17-58, 112)

-85-

ZEMSKOV, M.V.; IGNAT'YEVA, S.A.; MOROZOVA, V.P.; STEPANOV, I.I.; ZHURAVLEVA, N.V.

Yeast-induced production of antibodies, resistance and plasmoblastic  
reaction in animals. Zhur.mikrobiol., epid. i immun. 42 no.3:130-  
133 Mr '61. (MIRA 18:6)

1. Voronezhskiy meditsinskiy institut.

IGNAT'YEVA, S. G.

261T80

USSR/Metallurgy - Aluminum, Thermal Fatigue 21 Jan 53

"Concerning the Thermal Fatigue of Aluminum Single Crystals." V.I. Arkharov, S.G. Ignat'yeva, Yu.D. Kozmanov, Ural State U in A.M. Gor'kiy

DAN SSSR, Vol 88, No 3, pp 439-440

Describes expts to establish effect of temp gradient on structural changes, reflected in changes of Laue patterns, when Al single crystals are subjected to cyclic heat treatment. This is revision of assumption presented in earlier

261T80

work (DAN USSR, Vol 83, p 681, 1952), in which influence of temp gradient on thermal fatigue was considered practically nonexistent. As result of expts, authors concluded that thermal fatigue of Al single crystals is basically caused by temp gradients, but X-ray structural picture of this phenomenon reflects mosaic structure of crystals. Presented by Acad I.P. Bardin 22 Nov 52

IGNATYEVA, S. I.

Metallurgical Abst.  
Vol. 21  
May 1954  
Properties of Metals

Thermal Fatigue of Single Crystals of Aluminum. *V. I. Arsharov, S. I. Ignatyeva, and Yu. D. Kozmanov (Doklady Akad. Nauk S.S.S.R., 1953, 88, (3), 439-440).—(In Russian).*  
Cycling of single crystals of Al between 300°, 400°, 500°, or 600° C. and 18° C. (by quenching) results in changes in the form of the Laue spots on X-ray-diffraction photographs. Experiments on crystals of decreasing dia. show the beginning of changes in the spots at an increasing number of cycles, thus indicating that the X-ray changes result from plastic deformation induced by temp. gradients. It is concluded that thermal fatigue is caused by temp. gradients and that the rate of the fatigue depends on the mosaic structure. (Translated by the U.S. National Science Foundation (NSF-tr-3)).—D. M. P.



IGNAT'YEVA, T.

Personnel of the "Trekhgornaya manufactura" mobilizes potentialities for increased production. Sots.trud 4 no.8:  
54-60 Ag '59. (MIRA 13:1)  
(Moscow--Textile industry)

ACCESSION NR: AP4025913

S/0056/64/046/003/0829/0830

AUTHORS: Lazarev, B. G.; Lazareva, L. S.; Makarov, V. I.; Ignat'yeva, T. A.

TITLE: Effect of impurities on the superconducting transition temperature in thallium

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 46, no. 3, 1964, 829-830

TOPIC TAGS: thallium, superconductivity, superconducting transition, superconducting transition temperature, impurity effect, impurity valence, impurity atomic radius, electron mean free path, thallium superconductivity, thallium superconductivity pressure variation

ABSTRACT: The effect of impurities having various valences and atomic radii on the superconducting transition temperature ( $T_c$ ) of thallium is investigated, in view of the established marked dif-

Cord

1/17

ACCESSION NR: AP4025913

ference in pressure variation between thallium and other superconductors such as lead, indium, and aluminum. An impurity with valence lower than thallium (Hg, Cd) lowers  $T_c$ , while one with higher valence (Bi, Sb) raises it. Differences in the atomic radius likewise have a different effect on  $T_c$ . In this respect thallium is no different from other superconductors, and the impurities affect  $T_c$  in accordance with the differences in their electron free paths, valences, and atomic radii. Orig. art. has: 1 figure.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN UkrSSR (Physicotechnical Institute, AN UkrSSR)

SUBMITTED: 27Aug63

DATE ACQ: 16Apr64

ENCL: 01

SUB CODE: PH.

NO REF SOV: 001

OTHER: 004

Card

2/12

Card 1/2

ACCESSION NR: AP5010499

bles. inside and outside the pressure vessel, respectively. The tests show that  
conditions can reverse the sign of the pres-

LAZAREV, B.G., akademik; LAZAREVA, I.S.; IGNAT'YEVA, T.A.; MAKAROV, V.I.

Topological changes in the Fermi surface of thallium due to impurities. Dokl. AN SSSR 163 no.1:74-75 J1 '65. (MIRA 18:7)

1. Fiziko-tekhnicheskii institut AN UkrSSR. 2. AN UkrSSR (for Lazarev).

LAZAREV, B.G.; LAZAREVA, L.S.; MAKAROV, V.I.; IGNAT'YEVA, T.A.

Effect of impurities on the temperature dependence of a superconducting thallium junction on pressure. Part 1. Zhur. eksper. i teor. fiz. 48 no.4:1065-1070 Ap '65. (MIRA 18:5)

1. Fiziko-tekhnicheskiy institut AN UkrSSR.

BRANDT, N.B.; GINZBURG, N.I.; IGNATIYEVA, T.A.; LAZAREV, B.G.; LAZAREVA, L.S.;  
MAKAROV, V.I.

Effect of impurities on the pressure effect in thallium. Part 2.  
Zhur.eksp.i teor.fiz. 49 no.1:85-89 J1 '65.

(MIRA 18:8)

L. Moskovskiy gosudarstvennyy universitet i Fiziko-tekhnicheskii  
institut AN UkrSSR.

L 3893-66 EWT(1)/EWT(m)/EWP(t)/EWP(b) IJP(c) JD/GG

ACCESSION NR: AP5018076

UR/0020/65/163/001/0074/0075

AUTHOR: Lazarev, B. G. (Academician AN UkrSSR); Lazareva, L. S.; Ignat'yeva, T. S.  
A.; Makarov, V. I.

TITLE: On the change of the topology of the Fermi surface in thallium under the influence of impurities

SOURCE: AN SSSR. Doklady, v. 163, no. 1, 1965, 74-75

TOPIC TAGS: superconductivity, thallium, impurity effect

ABSTRACT: The authors observed experimentally a singular behavior in the temperature of the superconducting transition ( $T_c$ ) of thallium (change in the number of valleys on the Fermi surface) in investigations of the influence of impurities on the pressure dependence of  $T_c$ . The study was made by investigating the joint influence of impurities of different valences and of the pressure on  $T_c$  of thallium. The results show that the impurities whose valence is larger than that of thallium (Bi) decrease the positive pressure effect with increasing concentration, causing the pressure to become negative starting with a certain value of the concentration (0.2 at.%). In the case of an impurity of lower valence (Hg), the positive pressure effect increases at low concentrations. With further increase of the concentration, the positive effect decreases and becomes negative at ~0.9 at.% Hg. The

Card 1/2



L 3893-66

ACCESSION NR: AP5018076

6  
results are interpreted as an experimental confirmation that one of the valleys of the Fermi surface of thallium vanishes under the influence of an impurity. "The authors thank V. G. Bar'yakhtar for a discussion." Orig. art. has: 2 formulas and 1 figure. 11.53

ASSOCIATION: Fiziko-tehnicheskiy institut Akademii nauk UkrSSR (Physicotechnical Institute, AN UkrSSR) 44.12

SUBMITTED: 16Feb65

ENCL: 00

SUB CODE: 88

NR REF SOV: 007

OTHER: 005

  
Card 2/2

L 12062-65 E.I(d)/LIT(1)/T. (m)/EEC' .)-2/ENG(v)/EEC-/FCS(k)/ENA(h) Po-4/  
Pd-i/Pe-8/Pq-4/Pg-4/P1-4/Pk-4/P1-4 AFWL/SSD/AEDC(a)/ASD(f)-2/AFETR/ASD(d)/BSD/  
ASD(p)-3/AEDC(b) SSD(a) ASD(gs)/ESD(t) ASD' MLX  
ACCESSION NR: AT4048005 S/0000/64/000/000/0034/0044

AUTHOR: Boronin, A. P.; Ignat'yeva, T. G.

TITLE: Pulse-probe measurements in a shock tube

SOURCE: AN SSSR. Energeticheskiy institut. Fizicheskaya gazodi-  
namika i svoystva gazov pri vysookikh temperaturakh (Physical gas

12d-vo Nauka, 1964, 34-44

TOPIC TAGS: shock tube, shock wave, pulse probe, ionization, volt  
ampere characteristic, high temperature gas, pulse probe measurement,  
plasma, ion current, electron current

ABSTRACT: A description is given of an experimental procedure and  
apparatus for recording pulse-probe characteristics, making it possi-  
ble to evaluate the time variation of weakly ionized gas parameters  
behind a shock wave. Monitoring tests substantiating the method are  
also described. The measuring circuit consists of a time-delay gen-  
erator with linearly increasing voltage and small output voltage and  
a self-contained double-probe system (see Fig. 1 of the Enclosure).

a self-contained double-probe system (see fig. 1 of the microfilm)

Card 1/3

L 12062-65

ACCESSION NR: AT4048005

The same procedure is considered for the study of plasma properties by recording the dynamic volt-ampere characteristics. Electron con-

The same procedure is considered for the study of electron con-  
by recording the dynamic volt-ampere characteristics. Electron con-  
centration behind a reflected shock wave in argon at an initial pres-  
sure of 0.8 mm Hg and temperature 300K in Mach range 7 to 8 are given  
in tabular form. Two oscillograms of pulse-probe characteristics are  
presented. Orig. art. has: 7 figures, 1 table, and 6 formulas.

ASSOCIATION: none

SUBMITTED: 06Mar64

ENCL: 01

SUB CODE: ME

NO REF SOV: 009

OTHER: 007

ATD PRESS: 3124

Card 2/3

L 12062-65

ACCESSION NR: A74048005

ENCLOSURE: 01

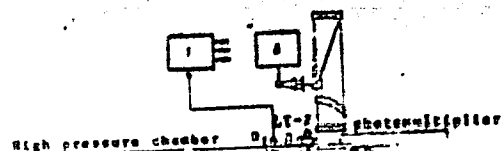
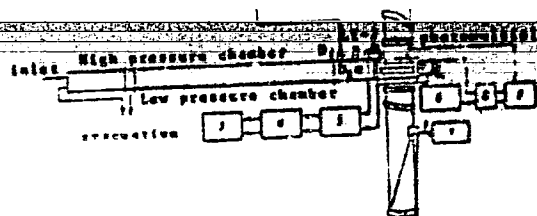


Fig. 1. Schematic diagram

1 - Synchronization unit, 2 - pulse tube power supply, 3 - pulse counter, 4 - pulse gen-



pulse tube power supply, 1 -  
pulse counter, 4 - pulse gen-  
erator, 5 - amplifier, 6 -  
linearly increasing voltage  
generator, 7 - camera, 8 -  
amplifier, 9 - oscillograph.

Card 3/3

~~IGNAT'YEV, T.N.~~  
KUSTANOVICH, M.S., insh.; IGNAT'YEV, T.N.

Tensometric investigation of strain in a model of a Francis runner  
due to centrifugal forces. [Trudy] LKZ no.4:177-181 '57.  
(Strains and stresses) (Hydraulic turbines) (MIRA 11:4)



IGNAT'YEVA, T.S.

Recommendations on the use of mean gradients and micromagnetic  
surveying in prospecting for rare metal pegmatite veins. Trudy  
VITR no.3:276-284, '61. (MIRA 15:7)  
(Prospecting—Geophysical methods)  
(Pegmatites)

S/169/62/000/007/060/149  
D228/D307

AUTHORS: Ignat'yeva, T. S. and Il'yushchenko, N. P.  
TITLE: Experimental study of the forms of rare metal replacement in pegmatite veins by applying the micromagnetic survey method of increased precision  
PERIODICAL: Referativnyy zhurnal, Geofizika, no. 7, 1962, 29-30, abstract 7A194 (Tr. Vses. n.-i. in-ta metodiki i tekhn. razvedki, sb. 3, 1961, 285-292)

TEXT: Sections of three deposits were surveyed micromagnetically in order to study the microfissuring of pegmatite veins. The statistical processing of the measurement results provided for the construction of roses of the  $\Delta Z$  isodynamic line directions. In the first deposit the rose diagram exposes no prevalent isoline directions. This is due to the complexity of the tectonic conditions and to the existence of diverse fissuring direction. There are four clearest isoline directions in the second deposit. Two are connected with the general direction of the vein's strike; the other two

Card 1/2

Experimental study of ...

S/169/62/000/007/060/149  
D228/D307

are connected with the orientation of the rare-metal replacement sections, which extend along the boundaries of structural mineralogic zones. In the third deposit, characterized by the highest intensity of metasomatic replacement processes, only one prevalent isodynamic line direction is actually displayed; it coincides with the vein's strike. Such a picture compels one to suppose that there is a considerable degree of regulation in the orientation of fissures, assembled in the independent zone of metasomatic replacement. The great opportunities of micromagnetic surveying are noted for the study of the microfissuring of pegmatite veins and its related rare-metal replacement pattern. [Abstracter's note: Complete translation.] ✓

Card 2/2

IGNAT'YEVA, V.M., kand.biologicheskikh nauk

Effect of the drainage degree of bogs on the planting time of  
farm crops. Trudy VNIIGIM 32:109-115 '59. (MIRA 13:8)  
(Drainage) (Planting time) (Peat soils)

AVER'YANOV, S.F., doktor tekhn.nauk; YUNEVICH, D.P., kand.tekhn.nauk;  
IGNAT'YEVA, V.M., kand.biol.nauk

Deep drainage of flat bogs. Gidr.i mel. 12 no.5:24-36  
M '60. (MIRA 13:7)  
(Swamps) (Drainage)

BORISOV, V.A., kand.tekhn.nauk; IGNAT'YEVA, V.M., inzh.

Once more on the pavement stabilization and the density  
standards for asphalt concrete. Avt.dor. 28 no.11:24-26  
N 165.

(MIRA 18:11)

100-111111, 11 11.  
Dissertation: "Distribution of Stresses in Straightway Automatic Butt Welding."  
Cand Tech Sci, Moscow Order of Labor Red Banner Engineering Construction Inst imeni  
V. V. Kuybyshev, 18 May 54. Vechernyaya Moskva, Moscow, 10 May 54.

SO: SUM 284, 26 Nov 1954

IGNAT'YEVA, V. S.

"Distribution of Stresses in One-pass Automatic Butt Welding"

p. 99, Strength of Welded Structures, Moscow, Mashgiz, 1958, 147 pp.  
Sbornik, Nauchno-Tekh. Obshchestvo mashinostroitel'noy promyshlennosti., kn. 48.

The book contains the principal reports of a conference held in Leningrad and sponsored by Leningrad Branch, of All-Union Sci., Engineering and Technical Soc (VNITO) of welders.



IGNAT'YEVA, V.S., kand, tekhn. nauk

State of stress developing during the welding of ring joints. Nauch.  
dokl. vys. shkoly; stroi. no. 3:156-166 '58. (MIRA 12:7)

1. Rekomendovana kafedroy stal'nykh konstruksiy Moskovskogo inzhenerno-  
stroitel'nogo instituta imeni V.V. Kuybysheva.  
(Welding) (Strains and stresses)

66957

SOV/137-59-9-19769

18.7200

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 9, pp 113 - 114 (USSR)

AUTHOR: Ignat'yeva, V.S.

TITLE: Distribution of Stresses in Single-Pass Automatic Welding<sup>18</sup>

PERIODICAL: V sb.: Prochnost' svarn. konstruktsiy, Moscow - Leningrad, Mashgiz, 1958, pp 99 - 119

ABSTRACT: The author found theoretically the dependence of the third constituent  $Z_z$  of stressed state directed along the thickness of the article, on the thickness of the article and conditions of single-pass automatic butt welding. She determined approximately the effect of plastic deformation<sup>26</sup> on the magnitude of natural residual stresses in plates under conditions of plane stressed state. To derive formulae the author used a solution known in the theory of elasticity, on thermal stresses in an infinitely long strip. It was shown that  $Z_z$  was small and that the stressed state could be considered to be a plane one under normal single-pass butt welding conditions.  $Z_z$  increases with reduced specific thermal energy  $Q$  cal/cm<sup>2</sup> and tends towards the extremal value which is proportional to the difference in temperature of the article prior to welding and at the moment when the zone of thermal

Card 1/2

66957

## Distribution of Stresses in Single-Pass Automatic Welding

SOV/137-59-9-19769

ductility disappears ( $600^{\circ}\text{C}$ ). Consequently,  $Z_z$  can attain high values in multiple-layer welding when each layer is built upon the cooled-off previous layer. The increase of  $Z_z$  with increased thickness of the article is insignificant, since  $Q$  raises simultaneously with increasing thickness. The author presents a graph showing the dependence of  $Z_z$  on  $Q$  for thicknesses of 14, 40 and 70 mm. ( $Q$  changes from 2 to 20,000 cal/cm<sup>2</sup>, and  $Z_z$  from 0 to 4,000 kg/cm<sup>2</sup>). Under conditions of plane stressed state in single-pass butt welding of sheets, the magnitude of longitudinal stresses increases rapidly with greater length of the butt seam( $\ell$ ) tending towards the extremal value exceeding  $\sigma_s$  in uniaxial drawing; the rate of increase is the higher the thinner the plate is. Transverse tensile stresses increase with higher  $\ell$ , tending towards the extremal magnitude at a rate depending on the plate thickness; they diminish tending towards zero when  $\ell$  approaches infinity. Their extremal magnitude is less than  $\sigma_s$  and the stressed state can be considered practically as a uniaxial one in plates up to 10 mm thickness if  $\ell > 1$  m and in plates up to 40 mm if  $\ell > 2$  m. Plastic deformations occurring in the case of sufficient elongation of the metal and if defects in the seam are absent, cannot noticeably affect the strength of weld joints. The calculation method can be used for the articles with  $b$  (width of the plate)  $> 2\ell$ , since natural stresses are damped at a distance of  $(1.5 - 2)\ell$  from the seam axis. The author presents computational formulae, graphs on the distribution of stresses and curves of the functions.

Card 2/2

V.V.

KIKIN, A.I., prof.; BELENYA, Ye.I., prof.; STRELETSKIY, N.S., prof.,  
doktor tekhn. nauk; LESSIG, Ye.N., dots.; LUKHANOV, K.K., dots.;  
DUBINSKIY, G.S., dots.; SHESTAK, G.A., dots.; IGNAT'YEVA, V.S.,  
dots.; KYBAKOV, V.M., dots.; GENIYEV, A.N., prof.; VEDENIKOV,  
G.S., dots.; TUBIN, S.M., kand. tekhn. nauk, nauchnyy red.;  
BEGAK, B.A., red. izd-va; OSENKO, L.M., tekhn. red.

[Metal construction; present state and outlook for future  
development] Metallicheskie konstruktsii; sostoianie i pre-  
spektivy razvitiia. Pod obshchei red. N.S.Streletskogo. Mo-  
skva, Gos. izd-vo lit-ry po stroit., arkhitekt. i stroit. materi-  
alam, 1961. 333 p. (MIRA 15:4)

1. Moscow. Moskovskiy inzhenerno-stroitel'nyy institut.
2. Kafedra metallicheskih konstruktsiy Moskovskogo inzhenerno-  
stroitel'nogo instituta imeni V.V.Kuybysheva (for all except  
Tubin, Begak, Osenko).

(Building, Iron and steel)  
(Aluminum, Structural)

36078

S/135/62/000/004/011/016  
A006/A101

1.4300

AUTHORS: Ignat'yeva, V. S. Candidate of Technical Sciences, Subbotin, Yu. V.,  
Engineer

TITLE: On the problem of determining deformations developing during the  
cooling of metal in the brittle temperature range

PERIODICAL: Svarochnoye proizvodstvo, no. 4, 1962, 28-30

TEXT: The authors analyze errors which they believe have been committed in the investigation and calculation of deformation kinetics during welding by Lashko, Lashko-Avakyan, Prokhorov and Rykalin (Ref. 1 - 4). A system for determining metal deformation in the heat-affected zone at 0.5 - 5.8 mm distance from the weld, is rejected. Some basic errors have also been made when developing a system for measuring deformations. A graph is reproduced which shows that its curves represent impracticable deformation processes. A conclusion drawn on the "heat-support" of the weld metal during the deformation of the weld joint is rejected as impossible and the terminology employed is found to be inexact. In discussing the possibility of evaluating analytically deformation concentrations of weld metal in the brittle temperature range, Lashko and Lashko-Avakyan

Card 1/2

On the problem of determining deformations ...

S/135/62/000/004/011/016  
A006/A101

commit errors which yield reduced true deformation values. Contradictions between Lashko and Prokhorov regarding a formula for the approximate calculation of the weld deformation in the transverse direction, are analyzed. The authors stress that this formula is applicable only to a particular case, i.e. to deformation in the center of a plate, and even then is not accurate. A method is suggested how to transform the formula into an operational one. Prokhorov's method of determining stress concentration is rejected. There are 3 figures and 4 Soviet references.

ASSOCIATIONS: MISI imeni Kuybyshev (Ignat'yeva); MVTU imeni Bauman (Subbotin)

X

Card 2/2

IGNAT'YEVA, V.S., kand.tekhn.nauk

Methods of approximation for calculating residual welding  
stressed in one-pass joint welding. Sbor. trud. MISI  
no.18:83-109 '62. (MIRA 16:2)

(Welding)  
(Strains and stresses)

PROKHOROV, N.N.; LIGNAT'YEVA, V.S.

Phase stresses during welding. Avtom.svar. 15 no.4:8-14 Ap  
'62. (MIRA 15:3)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche imeni Baumana.  
(Welding) (Phase rule and equilibrium)



PROKHOROV, N.N., doktor tekhn.nauk, prof.; IGNAT'YEVA, V.S., kand.tekhn.  
nauk

Solving the problem of phase stresses during the welding of  
hardenable steel, as a particular case in the solution of the  
temperature problem in the elasticity theory. Trudy MTU  
no.106:38-46 '62. (MIRA 16:6)  
(Steel—Metallography) (Phase rule and equilibrium)

IGNAT'YEVA, V.S.

Calculating the force of clamping the edges of parts during welding.  
Avtom.svar. 18 no.1:33-37 Ja '65. (MIRA 18:3)

1. Moskovskiy inzhenerno-stroitel'nyy institut im. V.V.Kuybysheva.

ACC NR: AT6030941

(A)

SOURCE CODE: UR/0000/66/000/000/0122/0132

AUTHORS: Ignat'yeva, V. S. (Candidate of technical sciences); Rubinshteyn, V. D.;  
Senatorov, A. P.

ORG: none

TITLE: Stresses arising during the welding of tempered steels as a consequence of drawing the zone near the seam

SOURCE: Moscow. Vyssheye tekhnicheskoye uchilishche. Prochnost' svarnykh konstruktsiy (Strength of welded structures). Moscow, Izd-vo Mashinostroyeniye, 1966, 122-132

TOPIC TAGS: welding, welding technology, butt welding, stress analysis

ABSTRACT: An effort is made to explain the variation of internal stresses and strains in the welded zone of tempered steels with the dimensions of the welded object and the type of weld. The study is limited to the special case of one-pass butt welds. As a first approximation, the completion of the weld is assumed to be instantaneous and structural variations in the drawing zone occur instantaneously. Under these assumptions stress components may be identified by application of the methods given by N. N. Prokhorov and V. S. Ignat'yeva (Resheniye zadachi o fazovykh napryazheniyakh pri svarke zakalivayushchikaya staley kak chastnyy sluchay resheniya temperaturnoy zadachi teorii uprugosti. Sbornik trudov MVTU im. Baumana. Svarka tsvetnykh splavov

Card 1/2

ACC NR: AT6030941

i nekotorykh legirovannykh staley. Oborongiz, 1962). The working equations for this special case are developed. Free deformations during drawing were measured for each of 3 specimens in 3 series of tests, and the amplitudes of critical stresses are plotted as a function of the distance from the weld seam. The tests indicate that in one-pass butt welding of annealed plates the metal of the seam and of the zone near the seam expands. The total residual stresses may be one of the factors in crack formation of a particular type and also one of the reasons for the development of microcracks during welding. Certain components were noted to be dependent upon the length of the seam and the plate thickness. Orig. art. has: 2 tables, 8 figures, and 9 equations.

SUB CODE: 11, 13/ SUBM DATE: 11Mar66/ ORIG REF: 003

Card 2/2

KUZ'MINA, N.N.; GALKINA, A.N.; LALETIN, L.V.; SUROVA, G.A.; ~~IGNAT'YEVA, V.V.~~;  
DERYABINA, V.P.; CHOVIYK, N.G., kand. khim. nauk, red.; MIKHETEV,  
N.I., red.; ANTONOV, V.P., tekhn. red.

[Methods for the analysis of electrolytes and solutions of galvanic  
and chemical coatings; a manual for workers in industrial laboratories]  
Metody analiza elektrolitov i rastvorov gal'vanicheskikh i khimicheskikh  
pokrytii; spravochnoe posobie dlia rabotnikov zavodskikh laboratorii.  
Kuibyshev, TSentr. biuro tekhn. informatsii, 1960. 215 p.

(MIRA 14:7)

1. Kuibyshev (Province)  
(Protective coatings) (Chemistry--Laboratory manuals)

FRIDMAN, Ya.D.; IGNAT'YEVA, Ye.M.

Antimony xanthates. Izv.AN Kir SSR.Ser.est.1 tekhn.nauk 2  
no.2:131-136 '60. (MIRA 14:10)  
(Flotation--Equipment and supplies) (Xanthic acid)

IGNAT'YEVA, Ye.N.; SHEVKUNOVA, Ye.A.

Case of acquired toxoplasmosis (toxoplasmic epedymoencephalitis).  
Sov.med: no.3:130-132 '62. (MIRA 15:5)

1. Iz nevrologicheskoy kliniki (zav. - prof. N.P. Popova)  
Moskovskogo oblastnogo nauchno-issledovatel'skogo instituta  
imeni M.F. Vladimirovskogo i otdela infektsiy s prirodnoy ocha-  
govost'yu (zav. - prof. P.A. Petrishcheva) Instituta epidemiologii  
i mikrobiologii imeni N.F. Gamalei.

(TOXOPLASMOSIS) (EPENDYMA--DISEASES)  
(ENCEPHALITIS)

IGNAT'YEVA, Ye.N.

Acquired toxoplasmosis form with a lesion of the central nervous system. Zhur. nevr. i. psikh. 65 no.3:353-357 '65.  
(MIRA 18:4)

1. Klinika nervnykh bolezney (zaveduyushchiy - prof. F.A. Poyemnyy) Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo instituta im. Vladimirenskogo (direktor P.M. Leonenko).



DARIYEV, A.D.; REZANOVA, O.I.; YEGOROVA, Zh.P.; IGNAT'YEVA, Ye.N.

Chemical and petrographic characteristics of the coals of  
Gusinoosersk deposits of the Buryat A.S.S.R. Izv. SO AN  
SSSR no.7 Ser. khim. nauk no.2:134-138 '65.

(MIRA 18:12)

1. Buryatskiy kompleksnyy nauchno-issledovatel'skiy institut,  
Ulan-Ude. Submitted May 5, 1964.

VAYNIKHOVICH, L.M.; IGNAT'YNA, Z.I. (Nikolayev)

Porphyrin disease. Vrach.delo no.10:1083-1085 0 '59. (MIRA 13:2)  
(SKIN--DISEASES)

IGNAT'YEVA, Z. P.

Inst of Evolutionary-Morphology, Acad Sci USSR

"Types of Growth of the Nervous-System in Vitro, Taken from Various Sections of the Main Nervous System"

SOURCE: Dok. AN, 30, No 6, 1941

IGNAT'YEVA, Z. P.

PA 6/49T53

USSR/Medicine - Glands

Medicine - Morphology

Jun 48

"Morphological Criterion of the Functional Condition  
of Glands Near the Thyroid Glands in Mammals," Z. P.  
Ignat'yeva, Inst. of Evolutionary Morph. I. A. N.  
Severtsov, Acad. Sci. USSR, 4 pp

"Dok Ak Nauk SSSR" Vol IX, No 9

Reviews existing data on subject. Describes own ex-  
periments, based on partial parathyroidectomy and  
nephrectomy performed on rats and rabbits. Concludes  
that parathyroidal cell composition is uniform.  
Cells react differently to stains due to their  
protoplasmic composition. Secretion is of nonlipid-  
nature, produced by protoplasm as a whole,  
and not by separate organelles. Submitted 8 Apr 48.

6/49T53

PA 8/49784

USSR/Medicine - Parathyroid  
Medicine - Histology

Jul 48

"Growth and Differentiation of the Embryonic  
Parathyroid Gland in Mammals," Z. P. Ignat'yeva,  
Acad Sci USSR, 34 pp

"Dok Ak Nauk SSSR" Vol LXI, No 1

Reports comparative histological study of the  
parathyroid glands in mammals. Considers that  
data provides morphological criterion of secretion  
activity whereby the main periods of operation  
of the parathyroid apparatus in embryogenesis can  
be established. Animals used were rabbits, rats

8/49784

USSR/Medicine - Parathyroid (Contd)

Jul 48

and guinea pigs. Submitted 8 Apr 1948.

8/49784

IGNAT'YEVA, Z. P.

PA 52/49T68

USSR/Medicine : Muscles, Physiology  
Medicine : Muscles, Regeneration and  
Regeneration May 49  
"Regenerative Potential of Transverse-Striated  
Muscle Tissue in Rats," Z. P. Ignat'yeva, 3 3/4 pp  
"Dok Ak Nauk SSSR" Vol LXVI, No 2  
Purpose of investigation was (1) to find conditions  
under which complete regeneration of an injured muscle  
is possible, and (2) to carry out a detailed histo-  
logical analysis of the general regeneration process.  
Describes experiments on white rats. Discusses  
results and states conclusions. Submitted 1 May 49,  
52/49T68

IGNAT'eva, Z., P.,

173T60  
USSR/Medicine - Regeneration of Muscles 1 Dec 50  
"Regeneration of Somatic Muscle Tissue in Mammals,"  
Z. P. Ignat'eva, Inst Animal Morph Iamnt A. N.  
Savertsov, Acad Sci USSR

"Dok Ak Nauk SSSR" Vol LIXV, No 4, pp 583-586

G. Clark's results on regeneration of muscles (1946)  
were not quite conclusive, because excised muscle  
tissue was placed back into the wound. A. N. Stepan-  
sky's and our results obtained (1949) on white  
are more significant, because conditions in actual

173T60

USSR/Medicine - Regeneration of Muscles 1 Dec 50  
(Contd)

trauma are duplicated. These results have now been  
confirmed on dogs, guinea pigs, and rabbits. Ten-  
sion is important condition which expedites regen-  
eration.

173T60

IGNAT'YNA, Z.P.

Development of myoneural junctions in normal histogenesis of the  
skeletal muscle. Tr.Inst.morf.shivot. no.11:175-196 1954.(MLRA 8:2)  
(MYONEURAL JUNCTION, physiology,  
prenatal & postnatal develop.)



IGNAT'YEVA, Z.P.

Regeneration of innervation in injured muscles in certain mammals.  
Trudy Inst.morf.shiv. no.11:265-287 '54. (MLA 8:2)  
(Muscles--Innervation)

*Ignat'yeva, Z. P.*

USSR/General Biology - General Histology.

B-3

Abs Jour : Ref Zhur - Biologiya, No 1, 1957, 181.

Author : Z.P. Ignat'yeva.

Inst :

Title : Supplementary Innervation as a Factor Contributing to the Restoration of an Injured Muscle in Mammals.

Orig Pub : Dokl. AN SSSR, 1955, 100, No 4, 817-820.

Abst : The cutting and particularly the infliction of serious injuries to a muscle cause the denervation of its distal terminal and sharply inhibits the regenerative process in the fibers of the muscle. Into the distal terminal of the muscle (semimembraneous muscles of the hip of a rabbit and a guinea pig) denerved as a result of its main nerve stem having been cut, the central terminal of a nerve which innervated the adjacent muscles was sewed in. A rapid reinnervation of the distal terminal of the cut muscle with the consequent complete

Card 1/2

*Incl. Animal Morphology in A. N. Severtsov  
AS USSR*

IGNAT Y EVA, Z. P.

USSR/ Medicine - Experimental morphology

Card 1/1

Pub. 22 - 46/49

Author: Ignatyeva, Z. P.

Title: Regeneration of a defect in the skeletal muscle of a rabbit and guinea pig by transplantation of a reduced muscular tissue

Periodical: Dok. AN SSSR 100/5, 1017-1020, Feb 11, 1955

Abstract: Three series of experiments were made on rabbits, guinea pigs and white rats to observe the process of regeneration of skeletal muscle defects (trauma) treated by transplantation of reduced muscular tissues. The results obtained are described. Seven USSR references (1952-1954). Illustrations.

Institution: Academy of Sciences USSR, The A. N. Severtsov Institute of Animal Morphology

Presented by: Academician A. D. Speranskiy, November 5, 1954

EXCERPTA MEDICA Sec.2 Vol.9/9 Physiology, etc. Sept 56

4119. <sup>2</sup>IGNATYEVA Z.P. \*The denervated muscle after reinnervation through the neighbouring nerve DOKLADY AKAD.NAUK SSSR 1955, 105/2 (360-363) Illus. 4 (Russian text)

The paper deals with the changes in the muscle after denervation and subsequent to reinnervation through the neighbouring nerve. Observations were made on 30 rabbits and 15 guinea-pigs. In one series of experiments the atrophic changes after denervation for a period of 6 months were studied. In the other series the processes after denervation and reinnervation were observed. After 2 weeks the axons were seen to be growing into the muscle; this was first manifested by the normalization of the hypertrophic nuclei and the diminution of fatty infiltration in the muscle bundles in touch with the reinnervating axons. The greater part of the muscle bundles was restored after only 3 months as far as the number and size of the nuclei was concerned. Further, new, thin muscle bundles appeared. The reinnervation of the old motor end-plates, which had begun in the first month, made considerable progress, and even new motor end-plates appeared. After 6 months the nerve stem had widely grown into the whole muscle and the muscle bundles had very often a greater diameter than the counter lateral control muscle. The work is an experimental proof of the normalization of the denervated muscle after a following early reinnervation through the neighbouring nerve.

Baier - Brno

USSR / General Biology. Individual Development.

B-4

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 47597

Author : Ignat'yeva, Z. P.

Inst : Leningrad University.

Title : A Comparative Histological Analysis of the Development of Muscle Elements and of Myoneural Junctions in Ontogenesis and in Regeneration.

Orig Pub : Sbornik Funktsional Morfol Dvigatel Apparat [Symposium on the Functional Morphology of the Motor Apparatus], Leningrad University, 1956, 167-174.

Abstract : The part played by myoneural junctions in the regeneration (R) of muscle tissue in adult guinea pigs, rabbits, rats, and dogs and in normal histogenesis in rabbit and rat embryos has been studied. The studies were made on traumatized semi-membranous muscle with partial disruption of myoneural

Card 1/2

IGNAT'YEVA, Z.P.

Remarks on the history of the development of the nervous system in mammals. Part 1: Embryogenesis of the organs of tactile reception (vibrissae) in forms mature and immature at birth. Arkh. anat. gist. 1 embr. 36 no.5:32-41 My '59. (MIRA 12:7)

1. Laboratoriya gistologii (zav. - prof. A.N. Studitskiy) Instituta morfologii zhivotnykh AN SSSR. Adres avtora: Moskva V-71, Bol. Kaluzhskaya ul., d.33. In-t morfologii zhivotnykh AN SSSR.

(CENTRAL NERVOUS SYSTEM, embryol.

tactile receptor organs, embryogenesis in mature & immature mammalian species (Rus))

(TOUCH &

same)

(HAIR

same)

IGNAT'YEVA, Z.P.

Development of minced muscular tissue when transplanted under the skin in dogs. Arkh. anat. gist. i embr. 39 no. 12:33-41 '60.

(MIRA 14:2)

1. Laboratoriya gistologii (zav. - prof. A.N. Studitskiy) Instituta morfologii zhivotnykh im. A.N. Severtsova AN SSSR. Adres avtora: Moskva, B-71, Leninskiy pr., 33, Institut morfologii zhivotnykh im. A.N. Severtsova AN SSSR.

(MUSCLES— TRANSPLANTION)

STUDITSKIY, Aleksandr Nikolayevich; IGNAT'YEVA, Zinaida Pavlovna; MITSKEVICH, M.S., doktor biolog. nauk, otv. red.; KOLPAKOVA, Ye.A., red. izd-va; UL'YANOVA, O.G., tekhn. red.

[Regeneration of muscles in higher mammals] Vosstanovlenie myshts u vysshikh mlekopitaiushchikh. Moskva, Izd-vo Akad. nauk SSSR, 1961, 190 p. (MIRA 14:8)

(REGENERATION (BIOLOGY)) (MUSCLE)



5.4500 1273, 1153, 1138

22870  
S/077/61/006/004/002/004  
D051/D113

AUTHORS: Meyklyar, P.V.; Ignat'yeva, Z.P.; Peskova, M.Z., Eberman, M.D.

TITLE: On the shape of the curve of spectral sensitivity of a photographic layer in the blue-violet spectral region.

PERIODICAL: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, v. 6, no. 4, 1961, 264-273

TEXT: Investigations are conducted to show that the shape of the curve of spectral sensitivity of a photographic layer in the blue-violet spectral region is determined by other factors apart from those already described in previous Soviet research by I.I.Breydo and Yu.N.Gorokhovskiy (Ref. 6: Dokl. AN SSSR, 1949, 65, 633; Ref. 7: Uspekhi nauchn. fotogr., 1951, 1, 213) and others. Experiments were conducted on two emulsions - an ammonia emulsion with layers 1.5-50 $\mu$  thick and an ammonia-free emulsion with layers 2.5-26 $\mu$  thick. The absorption spectra of the integral and spectral sensitivity of these layers were measured. Microsections of the developed layer were made for various wavelengths of radiation and for those optical densities for which the spectral sensitivity was determined. The absorption spectrum of

Card 1/8

J

22870  
S/077/61/006/004/002/004  
D051/D113

On the shape of the curve .....

the photographic layer was measured in an integrating sphere proposed by Ye.A.Kirillov and Zh.L.Broun (Fig.1). On the basis of the data obtained the authors plotted a number of curves for the ammonia-containing as well as the ammonia-free emulsions. The curves exhibiting the dependence of the spectral sensitivity  $S_\lambda$  of the layers ( $D=0.2 \pm D_0$ ) on  $\lambda$  (400-500 m $\mu$ ) (Fig.5 and 6) show that the diminution of their slope with reduced wavelength also holds for thin layers. Photographs of the microsections show with reduced wavelength a certain diminution of effective layer thickness, which, however, does not apply to ammonia-free emulsions. In order to find out whether the shape of the curve of spectral sensitivity is determined by other factors apart from spectral light absorption in the layer, ammonia and ammonia-free emulsions were prepared with or without iodine ions. These emulsions were given different times of second ripening. The obtained layers were spectrophotometrically tested and their absorption spectrum determined. Figure 11 shows a family of curves of spectral sensitivity for one of these series. It can be seen that the shape of the curves changes depending on the time of second ripening. The authors' observation that for ripened layers increasing sensitivity cannot be determined by a change in the absorption spectrum was found to be in agreement with the data obtained by B.G.Varshaver,

Card 2/8

22870

S/077/61/006/004/002/004  
D051/D113

On the shape of the curve ....

Zh.L.Broun, and K.V.Chibisov (Ref. 8: Dokl. AN SSSR, 1959, 126, 1021). In discussing the results obtained, the authors point out that a comparison between the calculated curve for the ammonia-containing layer of  $d=19\mu$  (Fig. 5, curve 2) and the curve of a layer not subjected to ripening (Fig. 11, curve 1) shows similarities. This means that in the blue-violet region of the spectrum, the shape of the curve of spectral sensitivity is also due to factors other than light absorption in the layer. It must be considered that light absorption by AgBr crystals is accompanied by the freeing of electrons, the spectral curve of photoconductivity being different from the curve of spectral absorption, as was noted by M.S. Yegorova and P.V. Meyklyar (Ref. 9: Zh. eksperim. i teor. fiz., 1956, 30, 60). A corresponding difference for photographic layers was observed at the authors' laboratory by L.G. Gross. The curve of spectral sensitivity of a photographic layer, therefore, must be compared with the spectrum of the photoeffect. Such a comparison was made by the authors and led to positive results, which will be published separately. The authors draw the following conclusions: (1) The Bouguer law also holds for emulsion layers; (2) the shape of the curve of spectral sensitivity is practically independent of the thickness of the emulsion layer; this curve has the usual shape even for very thin layers in

Card 3/8

22870  
S/077/61/006/004/002/004  
D051/D113

On the shape of the curve ....

which the developed grains are regularly distributed according to thickness; (3) the shape of the curve of spectral sensitivity in the blue-violet range changes with the time of second ripening; a selective increase in the layer sensitivity takes place; this increase is greatest for  $\lambda = 440-450 \text{ m}\mu$ ; (4) calculation of the curve of spectral sensitivity with the light absorption in the emulsion layer taken into consideration, shows that the shape of curves obtained under experiment cannot be determined by the absorption spectrum of the layer alone; (5) the spectral sensitivity of the photographic layer is determined by the spectrum of the photoeffect of the crystals of the emulsion. The authors thank B.Ya.Shuleyko, Z.V.Kharitonova, and B.M.Khabibullin for their help. There are 14 figures and 11 references: 9 Soviet and 2 non-Soviet-bloc. The reference to the English language publication reads as follows: G. Farnell, J. Photogr. Sci., 1959, 7, 83.

ASSOCIATION: Filial NIKFI (NIKFI Branch), Kazan'

SUBMITTED: December 7, 1959

Card 4/8

MEYLYAR, P.V.; IGNAT'YEV, Z.P.; YUSKOVA, M.F.; YUSKOVA, M.D.

Shape of the spectral sensitivity curve of the photographic layer in the blue-violet area of the spectrum. Zhur.nauch.i prikl.fot. i kin. 6 no.4.264-273 J2-Ag '61. (MIRA 14:11)

1. Filial \* Soyuznogo nauchno-issledovatel'skogo kinofotoinstituta, Kazan'.

(Photographic sensitometry)

(Photographic emulsions)

IGNAT'YEVA, Z.P.

Regeneration of a defect in the skeletal muscle of a dog by the method of transplanting granulated muscle tissue. Arkh. anat. gist. i embr. 40 no.6:31-40 Je '61. (MIRA 15:2)

1. Laboratoriya gistologii (zav. - prof. A.N.Studitskiy) Instituta morfologii zhivotnykh imeni A.N.Severtsova AN SSSR. Adres avtora: Moskva, V-71, Leninskiy pr., 33, Institut morfologii zhivotnykh imeni Severtsova AN SSSR.  
(MUSCLES TRANSPLANTATION) (REGENERATION (BIOLOGY))

Card 2/2

IGNAT'YEVA, Z.P.

Effect of pentoxyl on the normal antibody content in chronic  
hemorrhages. Pat. fiziol. i eksp. terap. 8 no.6:70 N-D '64.  
(MIRA 18:6)  
1. Kafedra mikrobiologii (zav. - prof. L.Ya. Ebert) Chelyabinskogo  
meditsinskogo instituta.

ACC NR: AP6019783

SOURCE CODE: UR/0220/66/035/003/0538/0548

AUTHOR: Vladimirova, M. G.; Ignat'yevskaya, M. A.

31  
B

ORG: Institute of Plant Physiology . im. K. A. Timirvazev, AN SSSR (Institut fiziologii rasteniy AN SSSR)

TITLE: Study of the effect of preservation conditions of Chlorella cultures on their productivity

SOURCE: Mikrobiologiya, v. 35, no. 3, 1966, 538-548

TOPIC TAGS: Chlorella, photosynthesis, algae

ABSTRACT: Algae collections were investigated for photosynthetic activity and the effects of temperature and light on them. More than 100 green species were examined (including 51 Chlorella and 19 Scenedesmus) at 10-12C under constant illumination not exceeding 500 lux from luminescent 15-w lamps. Higher light intensity killed some cultures, particularly Ankistrodesmus and Scenedesmus. As a rule, agar (1%) was employed with Tamiya medium and KNO<sub>3</sub>. Chlorococcum, Pleurochloris magna, Haematococcus pluvialis and some Ankistrodesmus, and Scenedesmus species were better preserved in Prat medium. Transplantation was carried out at 25-28C every 1.5-2 months at 1200-1700 lux and stored at 10C. Preservation was also carried out in the dark at 5C and no adverse effects were noted. In other experiments, the initial cultures were trans-

UDC: 582.263 : 579.864

Card 1/2



L 34777-66

ACC NR: AP6019783

planted for 5-6 days at 25-27C and some were stored at 10C, others at 25-27C. In fluid medium, algae were grown under intensive conditions; 100 ml of suspension (300-400 million cells/ml) were transferred to Erlenmeyer flasks (250 ml), and stored under the same conditions. Specimens at 25-27C were transplanted every 6-10 days. Cultures were revitalized at 25-27° for 3-5 days. in 100 ml-suspension and 500 ml-Prat or Tamiya fluid medium. In the final stage, algae were cultivated in 250-ml medium continuously illuminated at 10-12000 lux with 1% CO<sub>2</sub> air diffusion at 25-27C. Every experiment was repeated twice, with cell count ranging from 0.3-1.0 million/ml; growth time ranged from 4-6 and occasionally 12 days. Analysis was carried out microscopically and nephelometrically and the dry mass weight was determined. High productivity was revealed by mesophyllic *Chlorella pyrenoidosa* 82 and thermophillic strains *Chlorella* sp.K., 19 H/B, *Chlorella* sp. (p-strain 1), *Scenedesmus* sp. (Texas, 22- str. 1) at 10C, 500 lux when transplanted after 1.5-2.5 months. *Pyrenoidosa* 82 revealed reduction in activity after exposure at 25-27C while thermophillic algae continued to grow well. Their productivity was affected by factors following preservation, namely, intensity of cultivation and composition of intermediate media. Orig. art. has: 7 figures, 3 tables. [14]

SUB CODE: 06/

SUBM DATE: 19Jan65/

ORIG REF: 007/

OTH REF: 019 /

ATD PRESS: 5029

Card 2/2 *fv*

IGNATYEVSKAYA, S. N.

USSR/Biology

Card 1/1

Author : Ignatyevskaya, S. N. Cand. of Biological Sciences

Title : Red clover beyond the polar circle

Periodical : Priroda, 5, 101 - 104, May 1954

Abstract : Farming and cattle breeding on the Kolsk peninsula of the USSR was introduced during the Soviet regime in connection with the rapid growth of industry in this northern country. Successful development of animal breeding depends of course upon the development of a stable feeding base. Clover seeds from Moscow, Kungursk, Asinovsk and Narynsk were planted beyond the polar circle in Murmansk and other regions of European and Asiatic extreme North of the USSR with very good results. Photos of single-crop red clover growing at the Murmansk and Kolsk regions are included.

Institution : Acad. of Sc. USSR, The S. M. Kirov Branch, Kol'sk.

Submitted : ....

IGNAT'YEVSKAYA, S.N.

[Growing red clover in Murmansk Province] Vozdelyvanie  
krasnogo klevera v Murmanskoi oblasti. Kirovsk, Kirov-  
skii rabochii, 1955. 23 p. (MIRA 15:7)  
(Murmansk Province--Clover)

IGNAT'YEVSKIY, A., inzhener.

Equipment for the manufacture of large partitions. Ger. 1 sol'.  
stroil. no.6:18-20 Je '57. (MIRA 10:10)  
(Walls)

5./230

80408  
S/096/60/000/07/012/022  
E194/E455

AUTHORS: Sherstyuk, A.N., Candidate of Technical Sciences,  
Zaychenko, Ye.N., Ignat'yevskiy, Ye.A. and  
Sokolov, A.I., Engineers

TITLE: An Investigation of Inlet Pipe Nozzles for Centrifugal  
Compressors 3

PERIODICAL: Teploenergetika, 1960, Nr 7, pp 56-59 (USSR)

ABSTRACT: The design of the inlet pipe influences the efficiency of a compressor in two ways. Firstly, losses in the inlet pipe itself directly reduce the efficiency of the compressor. More important, the shape of the inlet pipe influences the velocity distribution at inlet to the runner. If the distribution becomes unsuitable it can appreciably reduce the efficiency of the runner because the angles of attack at the inlet edge differ from the required values. Despite the practical importance of this question, little experimental work has been done upon it. Accordingly, the present work gives the results of the first stage of an investigation on axially-symmetrical inlet pipes. The tests were made not on a compressor but on a special rig, illustrated in Fig 1,

Card 1/5

90403

S/096/60/000/07/012/022  
E194/E455

An Investigation of Inlet Pipe Nozzles for Centrifugal Compressors

which allows the influence of the runner to be excluded. However, the outline of the duct beyond the inlet pipe is made the same as in a normal runner in order to obtain the required boundary conditions. Tests were taken on 8 types of inlet pipe, 5 being axial and 3 radial. Sketches of the inlet pipes are given in Fig 2. Combined data on the losses are also plotted in the graphs of Fig 2 in each case as functions of Reynolds number. Since Mach numbers were small (less than 0.35), the test results were worked out without allowing for compressibility. All the inlet pipes, except type OR-80-V, have very low loss factors because of the low values of Reynolds number and in all cases there is an appreciable reduction in the losses as the Reynolds number increases. As was to be expected, the axial inlet pipe with the least losses is that in which the ratio of the inlet diameter to the outlet section is greatest. The greatest losses were obtained with the cylindrical inlet pipes. The tests show the advantages of using short cowls over the runner inlet. Data on the velocity distribution in the discharge section of the

Card 2/5

80408

S/096/60/000/07/012/022  
E194/E455

An Investigation of Inlet Pipe Nozzles for Centrifugal Compressors

inlet pipe are also presented in Fig 2. The tests were made for various values of average speed up to 110 metres/sec but because of the very slight influence of the Reynolds number of the velocity distribution Fig 2 gives mean curves. In all cases, except those of the conical and cylindrical inlet tubes, there is marked distortion of the velocity distribution. If the runner were designed without allowing for this distortion, there could be substantial reduction in efficiency. In the axial inlet tubes, the velocity distribution depends on the length of the cowl. It is most uniform with a cowl of medium length and comparatively uniform with a cylindrical inlet tube; but cylindrical tubes are not to be recommended because of their inherently high losses. Conical inlet tubes give a uniform velocity field and have small losses. Thus they are the most suitable of the axial inlet tubes, provided they can be accommodated in the overall dimensions. Their main disadvantage is their great length which can be overcome by making a profile of the kind illustrated in Fig 3. The results

Card 3/5

80408

S/096/60/000/07/012/022

E194/E455

An Investigation of Inlet Pipe Nozzles for Centrifugal Compressors

with the radial and diagonal inlet tubes are of special interest because these types sometimes have to be used and it is obvious that the runner design must make appropriate allowance for changes in the velocity distribution. Moreover, inlet tubes of this kind should not be used at high peripheral speeds because the Mach number at the tips of the discharge edges of the runner blades becomes excessive. One of the tasks of the work was to evaluate the reliability of approximate methods of calculating the velocity in relation to the design of the inlet tubes. The point is that approximate methods of calculating on curved channels are sufficiently accurate only if the boundary of the channel changes curvature smoothly. In the case under consideration, the change in curvature is not smooth: from the experimental results and velocity data given in Fig 4, it is concluded that approximate methods of calculation are not sufficiently accurate. Differences between test and calculated velocities may be 10 to 20% and, therefore, in important cases the velocity should

Card 4/5



80408

S/096/60/000/07/012/022  
E194/E455

An Investigation of Inlet Pipe Nozzles for Centrifugal Compressors ~~X~~  
be determined experimentally. There are 4 figures and  
3 Soviet references.

ASSOCIATION: MEI - NAMI (Moscow Power Institute and NAMI)

Card 5/5

IGOL'CHENKO, M.I.

Moisture content of the upper layer of sunflower seed piles in storage. *Izv.vys.ucheb.sav.; pishch.tekh.* no.5:9-12 '59.  
(MIRA 13:4)

1. Krasnodarskiy institut pishchevoy promyshlennosti, kafedra  
tekhnologii shirodobyvaniya.  
(Sunflower seeds--Storage)

IGNATYUK, A.P., inzh.; TSUKERNIK, Z.S., inzh.

Using tagged atoms for determining the speed of movement of  
concrete through steel pipes. Stroi. i dor. mashinostr 3 no.5:  
23-24 My '58. (MIRA 11:5)  
(Radioactive tracers--Industrial applications)  
(Concrete--Transportation)

concs. of HCl and I were supplied. Values for the concns.  
and the degree of inversion were at  
of HCl and I in g./l., and the degree of inversion were at  
17° 213.3, 344.0, and 54.1 (5 hrs.); 114.6, 271.2, and 56.2  
(1 hr.); 63.1, 244.3, and 55.8 (1 hr.); 18.0, 183.0, and 55.3  
(1 hr.); 372.9, 378.1, and 55.8 (0 time); 372.9, 376.3,  
and 57.8 (40°, 1 hr.); 300.4, 333.3, and 66.1 (40°, 5 hrs.);

IGNATYUK, A.G.

Chemical Abst.  
Vol. 48 No. 4  
Feb. 25, 1954  
Cellulose and Paper

③  
The diffusion of sulfuric acid and sugar through wood. P. N. Glinceva, N. A. Medvedeva, and A. G. Ignatyuk. *Lavijas PSR Zinatnes Akad. Vests* 1950, No. 4 (Whole No. 23), 75-86 (in Russian). — The possible use of the difference in diffusion velocity (I) of acid and sugars into moist spruce wood for the recovery of acid in wood hydrolysis was studied. Spruce (*Picea excelsa*) boards (II) (15 × 12 × 0.7-0.8 cm.) were used as dialyzing membranes in a sealed dialyzer of 2.5-l. capacity divided into 2 compartments of equal vol. I, which =  $AC/TS$ , where A is the vol. of soln. in I compartment of the dialyzer in l., C the concn. of solute passing through the wood membrane in kg./l., T the time in hrs., and S the membrane surface in sq. m., was studied under various conditions. I for dil.  $H_2SO_4$  (100.7 g./l.) through transverse sections (III) of II was 40 times that through radial and 80 times that through tangential sections. For concd.  $H_2SO_4$  (516.7 g./l.) comparable values were 30 and 60. I for concd.  $H_2SO_4$  was 2-3.5 times that for dil.  $H_2SO_4$  through III. I for dil. and concd.  $H_2SO_4$  through III was 3-6 times that for lactose in  $H_2O$  (102.3 g./l.). III (40 × 40 × 10 mm.) (24) of spruce, placed 2-3 mm. apart in a vessel, were vacuum-impregnated with  $H_2O$  or  $H_2SO_4$  solns. and covered with 800 cc. of test soln., and I was measured by the loss of solute in the soln. I (kg./sq. m./hr.) into III said. with  $H_2O$  of  $H_2SO_4$  (114.0 g./l.), glucose (102.1 g./l.) and lactose (102.1 g./l.) was 0.091, 0.039, and 0.034, resp. All concn. values for glucose are after inversion, and all expts. were carried out at 15°. The I of  $H_2SO_4$  into III impregnated with  $H_2SO_4$  was studied; the concn. in g./l. of the impregnating soln., that of the diffusing soln., and I (in kg./sq. m./hr.) after 1 hr. were 380.4, 529.6, and 0.27; 529.6, 681.7, and 0.34; 681.7, 916.0, and 0.44; 916.0, 1150.0, and 0.46; and 1027.0, 1257.0, and 0.46, resp. For the diffusion of  $H_2SO_4$  at 1257 g./l. into III impregnated with  $H_2SO_4$  at 1027 g./l. the difference between the original and the final acid concn. of the diffusing soln. continued to increase even after 16 hrs. immersion; for all other solns. this difference increased for 3-4 hrs. and then leveled off or decreased. J. L. Keays

IGNATYUK, A. G.

Chemical Abst.  
Vol. 48 No. 4  
Feb. 25, 1954  
Cellulose and Paper

③  
The diffusion of sulfuric acid and sugars into wood. P. N. Odintsov, N. A. Medvedevs, and A. G. Ignatyuk, *Latvijas PSR Zinatnu Akad. Vests* 1950, No. 5 (Whole no. 34), 11-22; cf. preceding abstr.—The diffusion velocity (I) of  $H_2SO_4$  and glucose from aq. solns. into wood in a counter-current diffusion battery was studied. A soln. contg. 900.4 g.  $H_2SO_4$ /l. and 348 g. glucose/l. was passed through a battery of 25 diffusers (80 cc. capacity) contg. 20 g. spruce chips (II) ( $3 \times 3 \times 10$  mm.) at 51.5%  $H_2O$ . After 24, 36, and 52 hrs. the solns. from the diffusion battery contained 254.0, 229.5, and 144.4 g.  $H_2SO_4$ /l., and 190.8, 182.0, and 148.8 g. glucose/l. II (67.2%  $H_2O$ ) (73.3 g.) were placed in a 25-mm. tube and covered with 112 cc. of test soln.; samples were removed and analyzed in 2 and 5 min. The concns. in g./l. of  $H_2SO_4$  in the test solns. at 0, 2, and 5 min. were 93.15, 89.25, and 84.25; of lactose, 100.72, 99.53, and 98.22. The I of  $H_2SO_4$  and glucose in aq. soln. was studied in a battery of 17 diffusers, 120-cc. capacity, each diffuser contg. 55 g. II (67.2% moisture); the bottom of the 1st diffuser (fed from a buret) was connected to the top of the 2nd, etc., and the last diffuser was connected to a calibrated funnel. The test soln. was drawn through the battery by a suction pump attached to the funnel. The concn. of  $H_2SO_4$  in g./l., of glucose in g./l., and lbs I (kg./sq. m./hr.) for  $H_2SO_4$  and glucose were 106.4, 112.6, 0.0072, and 0.0064 and 204, 216, 0.019, and 0.011 for a feed rate of 1 cc./min.; 264, 216, 0.035, and 0.019 for 2 cc./min.; 854, 331.5, 0.060, and 0.014 for 1 cc./min.; 854, 331.5, 0.068, and 0.024 for 2 cc./min.; and 854, 331.5, 0.138, and 0.033 for 4 cc./min.

John Lake Kesya

CHEPIGO, S.V.; ZHIGULENKO, L.N.; IGNATTYUK, A.G.; BANNIKOVA, A.A.

Characteristics and properties of active "kollaktivit" coal.

Gidrolis. i lesokhim. prom. 10 no.3:8-10 '57.

(MLRA 10:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrolisnoy  
i sul'fitno-spirovoy promyshlennosti.  
(Coke--Analysis)

L 46994-66 EWP(j)/EWT(m)/T IJP(c) RM/WW  
 ACC NR: AP6027275 (A) SOURCE CODE: UR/0191/66/000/008/0018/0021

AUTHOR: Barlin, A. A.; Ignatyuk, A. G.; Kefeli, T. Ya.; Sel'skaya, O. G.; Silvergin,  
Yu. M.; Komleva, L. K.

ORG: none

32  
31  
B

TITLE: Xylitol oligoester acrylates and some properties of their polymers

SOURCE: Plasticheskiye massy, no. 8, 1966, 18-21

TOPIC TAGS: acrylate, xylitol, polycondensation, adipic acid, sebacic acid, phthalic anhydride

ABSTRACT: The synthesis and polymerization of oligoester acrylates (OEA) based on xylitol and some properties of products of their curing were studied. The synthesis was carried out by the condensation telomerization method and involved the reaction of xylitol with adipic acid, sebacic acid or phthalic anhydride, with methacrylic acid as the monofunctional telogen,  $H_2SO_4$  or p-toluenesulfonic acid as the catalyst and hydroquinone as the inhibitor. As indicated by the amount of water formed by the reaction and by the analysis of physicochemical properties of the synthesized OEA, the polyesterification reaction in toluene does not involve xylitol itself, but its 1,4-monoanhydride (xylitan). The degree of dehydration of xylitol depends on the nature of the catalyst: it was much greater in the presence of  $H_2SO_4$  than in the presence of p-toluenesulfonic acid. The conditions of synthesis of the product of the reaction with

Card 1/2

UDC: 678.674'65'52'28.01:539.2



L 40994-55

ACC NR: AP6027275

phthalic anhydride were studied most thoroughly. The amount of methacrylic acid was found to have a marked effect on the formation of this oligoester and its separation from the reaction mixture. A study of the physicommechanical properties of the three cured oligoesters showed that as the flexibility of the oligomer block of the original oligoester increases, the specific impact strength of the polymers rises, and the hardness and bending strength fall off. The oligoesters were found to have a satisfactory thermal stability and resistance to thermal-oxidative degradation. Orig. art. has: 4 figures and 2 tables.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 011/ OTH REF: 002

Card 2/2

IGNATYUK, G. L.

IGNATYUK, G.L., inzhener.

Water resources of the Russian Federation at the All-Union Agricultural Exhibition. Gidr. 1 mel. 6 no.7:13-16 Ag '54. (MLRA 7:9)  
(Water resources development) (Moscow--Agricultural exhibitions) (Agricultural exhibitions--Moscow)

IGNATYUK, G.L., inzhener.

The Suez Canal. Gidr.1 mel.8 no.10:39-40 0'56. (MLRA 9:10)  
(Suez Canal)

IONATYUK, G.L., inzhener.

Conference on the water level of the Caspian Sea. Gidr. 1 mel.  
8 no.12:60-61 D '56. (MLBA 10:1)  
(Caspian Sea)